

92-245636/30

A60 D21 E32 G01 I02

MITV 90.10.30

MITSUBISHI MATERIALS CORP

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D(8-B9A, 9-E) E(35-C) G(1-A2) I(2-G11)

NO A CODES

90.10.30 90JP-292426 (92.06.10) C01G 9/02, B01F 3/08, C01G

9/02

Ultrafine grain zinc oxide powder prodn. - by adding zinc salt aq. soln. to aq. alkali, maintaining at specified temp. and precipitating oxide

C92-109501

Zinc salt aq. soln. is dropped into alkali aq. soln. at temp. at least 60 deg. C. It is kept at least 60 deg. C for at least 30 min. Precipitate of zinc oxide is produced at final pH at least 9. Ultra fine grain zinc oxide powder of average grain dia. 0.02-0.05 microns is produced.

USE/ADVANTAGE - Ultrafine grain zinc oxide powder having good dispersibility and high crystal property can be produced without burning process. Transparent coated membrane having good ultraviolet shielding effect can be obtd. The powder is used for sun-screening cosmetics, UV membrane of motorcar, a furniture or optical material.

In an example, 100 deg. C NaOH aq. soln. (1 mol/l) 190 cc was dropped into ZnCl₂ aq. soln. (1 mol./l) 100 cc. It was kept at 100 deg. C for 30 min. and ZnO was produced. At this time, its pH was 9. Prod. was rinsed to remove salts, and filtered and dried. Oxide zinc powder obtd. had specific surface area 40 m²/g, it had high crystal property of prim grain dia. 0.03 micron. (4pp Dwg.No.0/2)